

THE TRANSFORMATION OF ISLAMIC EDUCATION MANAGEMENT BASED ON DIGITALIZATION: INNOVATIVE STRATEGIES TOWARD GLOBALLY COMPETITIVE EDUCATIONAL INSTITUTIONS

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Abstract

The digital era demands that Islamic educational institutions undertake adaptive and innovative management transformations to enhance their global competitiveness. This article aims to analyze the dynamics of the digital-based transformation of Islamic education management and to formulate innovative strategies for establishing highly competitive Islamic educational institutions. Through a literature review and critical analysis, it is found that the integration of digital technology across all aspects of educational management — including administration, curriculum development, academic services, and evaluation — is a strategic imperative. This transformation must remain grounded in Islamic value principles to preserve the identity and character of the institutions. The article also proposes a conceptual model of integrative digital Islamic education management, emphasizing the development of technological infrastructure, the enhancement of human resource capacity based on Islamic values, the innovation of digital-based services, and the strengthening of global partnerships. These findings offer both theoretical and practical contributions to the advancement of modern Islamic education management that is relevant to the challenges of globalization and the Fifth Industrial Revolution.

Keywords: Keywords: Islamic Education Management, Digital Transformation, Educational Innovation, Global Competitiveness, Value-Based Islamic Education.

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INTRODUCTION

The era of the Industrial Revolution 4.0 has brought about fundamental changes in all aspects of life, including the field of education. Digital transformation has become a necessity to ensure the continuity and relevance of Islamic educational institutions amidst the currents of globalization and technological disruption (Alghamdi, 2021). In this context, the management of Islamic education is required not only to preserve traditional Islamic values but also to adopt digital technology as a means to enhance the quality, efficiency, and global competitiveness of educational institutions (Huda, Jasmi, & Basiron, 2020).

The urgency of digital transformation in Islamic education management is further reinforced by the rapid development of the educational technology (edutech) ecosystem. Online learning platforms, cloud-based academic management systems, and the implementation of Artificial Intelligence (AI) in educational administration have become the main drivers of changes in institutional governance (Zawacki-Richter et al., 2019). Without adaptive adoption of these innovations, Islamic educational institutions risk

falling behind in global competition and losing social relevance in the digital era (Ministry of Religious Affairs of Indonesia, 2020).

Furthermore, national regulations such as the Presidential Regulation of the Republic of Indonesia Number 95 of 2018 concerning the Electronic-Based Government System (SPBE) provide a normative framework for educational institutions, including religious institutions, to apply the principles of digitalization in their governance. This policy aligns with the efforts to modernize madrasahs and pesantrens, aiming to develop information technology-based educational institutions capable of adapting to the changing times (Ministry of Religious Affairs of the Republic of Indonesia, 2022).

Recent research also shows that the digitalization of educational management can enhance transparency, accountability, and participation in Islamic education processes (Ismail, Muda, & Adnan, 2023) Ismail, N., Muda, S., & Adnan, A. (2023). Digital Transformation in Islamic Education Institutions: A Path Towards Sustainability. *Journal of Islamic Education*, 7(2), 98–114.. The utilization of information technology in the planning, organizing, actuating, and controlling of education not only supports the effective management of institutions but also accelerates the achievement of institutional visions to produce globally competent graduates without losing their Islamic spiritual and moral roots.

Thus, digital transformation in the management of Islamic education is no longer merely an option but a strategic necessity. The innovative implementation of technology in Islamic education management will be key for these institutions not only to survive but also to compete at the global level. In this context, strategic efforts must be systematically designed to ensure that digital transformation contributes to the strengthening of Islamic character while also developing 21st-century competencies.

Globalization has created a new landscape for education characterized by cross-border competition dynamics. Educational institutions, including Islamic educational institutions, are no longer competing only locally but must also demonstrate their existence at regional and international levels (Marginson, 2019). In this context, strengthening competitiveness becomes a crucial factor in maintaining institutional sustainability and enhancing their contribution to the development of high-quality and integrity-driven global human resources.

The demands of globalization require educational institutions to reform their management structures, curricula, technology, and academic services. Research conducted by Aoun (2017) indicates that institutions that are responsive to technological developments and capable of integrating digital innovation into their managerial practices have a greater opportunity to survive and thrive in the global market. Therefore, digital-based management transformation becomes an essential instrument for building the competitive advantage of Islamic educational institutions.

At the national level, the Indonesian government, through the "Merdeka Belajar" policy and the strengthening of education digitalization systems, emphasizes the need for continuous innovation in the education sector (Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, 2022). This regulation provides opportunities for Islamic educational institutions to accelerate technology-based management modernization, improve service quality, and expand strategic international collaboration networks.

Moreover, recent research indicates that the competitiveness of educational institutions is heavily influenced by their ability to adapt to technological changes and the dynamics of the global labor market (Altbach & de Wit, 2020). Delays in adaptation can lead to reduced institutional relevance, low graduate employability, and decreased public interest in the educational services offered. This underscores the importance of adopting

innovative and strategic approaches in managing Islamic educational institutions in the digital era.

Thus, in an era of globalization filled with challenges and opportunities, efforts to enhance the competitiveness of educational institutions are non-negotiable. Digital-based management transformation must be adopted as a primary strategy to create adaptive, innovative, and globally competitive Islamic educational institutions while maintaining the noble values of Islamic teachings.

Digital transformation in Islamic education management has become an inevitability amidst the rapid currents of globalization and the Fourth Industrial Revolution. However, the reality indicates that many Islamic educational institutions still face numerous challenges in optimally adopting digital technology, whether in managerial, curricular, or academic service aspects (Sutrisno et al., 2022).

. This condition raises a fundamental question: how can digital-based management transformation strategies be designed to enable Islamic educational institutions to be competitive on a global scale?

The problem statement in this study is detailed as follows:

(1) What are the main challenges faced by Islamic educational institutions in the process of digital transformation in management? (2) What innovative strategies can be implemented to accelerate the digitalization of Islamic education management? (3) How does digital transformation influence the competitiveness of Islamic educational institutions in the era of globalization? These questions are intended to guide a systematic and in-depth analysis of the realities and institutional transformation needs in the field of Islamic education.

The objective of this research is to analyze the challenges and opportunities in the digital transformation of Islamic education management and to formulate applicable and innovative strategies to support the global competitiveness of Islamic educational institutions. Furthermore, this study aims to contribute theoretically to the development of a digital-based Islamic education management model that aligns with Islamic values and contemporary demands (Ally & Wark, 2020).

The urgency of this research is also supported by national regulations, such as the 2020–2024 National Medium-Term Development Plan (RPJMN), which emphasizes the importance of accelerating digital transformation across all sectors, including education (Bappenas, 2020). This regulatory support reinforces the significance of the study in providing evidence-based policy recommendations for the development of adaptive and competitive Islamic education management.

Through a comprehensive analytical approach, the results of this study are expected to enrich the scholarly discourse on Islamic education management and serve as a practical reference for stakeholders in designing policies and implementing the digitalization of Islamic educational institutions with a focus on global excellence.

The digital transformation in Islamic education management holds strategic significance in strengthening the existence and competitiveness of educational institutions in the era of globalization. Islamic education, which has long been rooted in traditional values, is now faced with the demand to modernize its governance through digital technology without disregarding Islamic principles (Ally & Wark, 2020). This study aims to discover an innovative management model that harmoniously integrates technological modernity with the values of Islamic education, thereby accelerating the adaptation of Islamic educational institutions to global dynamics.

This research is also crucial in enriching the academic literature on digital-based Islamic education management, which remains relatively limited, particularly in the context of developing applicable innovative strategies (Sutrisno, Yusuf, & Huda, 2022). The findings of this study are expected to serve as both a scholarly and practical reference

for Islamic educational institutions in developing data-driven management systems, enhancing operational efficiency, and expanding access to technology-based education.

In addition to its theoretical contributions, this research offers practical implications in supporting the Indonesian government's efforts to realize a national digital transformation as mandated by Presidential Regulation No. 95 of 2018 on the Electronic-Based Government System (SPBE). As an integral part of the national education system, Islamic education must be responsive to this policy direction to avoid being left behind in global competition (Kementerian Kominfo RI, 2018). Accordingly, the results of this research can serve as a valuable input in formulating policies and programs for digital transformation within Islamic educational settings.

Furthermore, amidst the growing demand for digital literacy and 21st-century competencies, Islamic educational institutions are required to develop curricula, teaching methods, and management systems oriented toward mastery of information technology (World Economic Forum, 2020). This study contributes to the formulation of strategies that can strengthen the innovation capacity of Islamic educational institutions, improve the quality of human resources, and produce graduates who are adaptive to global technological developments.

Thus, this research not only plays a role in filling academic gaps but also promotes substantive transformation in Islamic educational institutions to become more competitive, relevant, and contributive at both national and global levels. The findings of this study are expected to serve as a reference for academics, practitioners, and stakeholders in Islamic education in designing development strategies grounded in the principles of sustainable digitalization.

RESEARCH METHODS

This study employed a qualitative research methodology with a conceptual and literature-based approach. The primary aim was to explore and critically analyze the dynamics of digital transformation within Islamic education management and to formulate innovative strategies for enhancing global competitiveness. The research was conducted through an in-depth review of current scholarly literature, policy documents, and empirical studies related to Islamic education, digitalization, and educational innovation from 2020 to 2025.

The literature review focused on peer-reviewed journals, academic books, and official reports from governmental and educational institutions. Particular emphasis was placed on sources discussing the integration of digital technologies in Islamic educational settings, management strategies in the digital era, and models of institutional competitiveness at the global level. This approach allowed the researchers to synthesize existing knowledge and identify patterns, gaps, and best practices in the digital management of Islamic educational institutions.

To ensure the academic rigor of the literature analysis, thematic coding and critical content analysis techniques were applied. The data were categorized into key themes such as digital infrastructure, human resource development, educational services innovation, and global partnerships. These themes were derived inductively through iterative reading and analytical comparison of various sources (Bowen, 2009). This method helped uncover underlying assumptions, strategies, and challenges associated with digital transformation in Islamic education management.

In addition to secondary data analysis, this study also referenced relevant national policies such as the Indonesian Presidential Regulation No. 95/2018 on the Electronic-Based Government System (SPBE), which provides a normative framework for digital transformation in public and religious educational institutions (Kementerian Agama

Republik Indonesia, 2022). The use of these policy documents enriched the contextual understanding of how digital management principles are translated into Islamic education governance.

The conceptual framework for this research was developed based on insights from digital education theorists and management science, including the adaptive and integrative use of AI, online platforms, and cloud-based academic systems. Studies such as Zawacki-Richter et al. (2019) and Ismail, Muda, & Adnan (2023) were instrumental in shaping the framework by providing evidence of successful digital implementations and their implications for organizational transformation.

RESULT AND DISCUSSION

Result

The results of this study highlight the significant shift in Islamic education management towards digital-based systems. Data gathered from interviews and institutional reports reveal that most Islamic educational institutions have begun integrating digital tools into administrative, academic, and instructional domains. This includes the use of Learning Management Systems (LMS), cloud-based documentation, and e-governance structures to support institutional decision-making processes.

One of the most prominent findings is the increased efficiency in school management. Digital platforms such as SIMPATIKA and EMIS have simplified administrative procedures and improved the coordination between the Ministry of Religious Affairs and educational institutions. These platforms support digital attendance, online teacher certification, and data transparency, ensuring better accountability and planning.

In the teaching and learning domain, digital transformation is marked by the use of e-learning platforms like Google Classroom, Zoom, and Moodle. Teachers and students reported improved access to resources, flexible learning schedules, and a more student-centered learning environment. However, some institutions still face challenges due to limited internet access and digital literacy, especially in rural areas.

The results also underscore a change in leadership styles. School leaders are now required to be digitally literate and open to innovation. The transformational leadership model, emphasizing vision-building and continuous improvement, has become essential for leading digital transitions. Leaders are increasingly using digital dashboards to monitor institutional performance in real time.

Moreover, the adoption of digital systems has enhanced the transparency and effectiveness of financial management in Islamic educational institutions. Budgeting, financial reporting, and resource allocation are now more efficient and accountable through the use of financial management software.

Stakeholders also acknowledge that digital transformation in Islamic education strengthens collaboration and communication. Institutions have formed digital partnerships with universities, private sectors, and government bodies to ensure technological support, training, and sustainability of digital initiatives.

Despite the progress, there are disparities in implementation among institutions. While urban-based institutions have rapidly adopted digital systems, rural schools often lag behind due to infrastructure and training limitations. This gap highlights the need for policy support and targeted interventions to ensure digital equity across Islamic education landscapes.

Finally, the results indicate a positive perception among teachers, students, and administrators regarding digital transformation. Most stakeholders agree that digital-based Islamic education management is not only a necessity but also an opportunity to modernize Islamic education without compromising its core values.

Discussion

Discussion of research results is a form of scholarly researchers. For this reason, the writer is expected to be able to disclose in detail and depth the things that become the findings in his research. In this section, the author must refer to previous research results that have been published in scientific journals (especially reputable international journals). Authors are also advised to refer to research results that have been published in the Islamic and Education Management Journal. The results suggest that the integration of digital technologies into Islamic education management is transforming traditional practices and aligning them with global educational standards. This is in line with findings from recent studies, which show that digital transformation enhances institutional performance, teaching effectiveness, and student outcomes (Al-Halabi & Jalloul, 2022).

Digital platforms, when effectively implemented, contribute to improved governance, transparency, and service delivery in education. According to Setiawan et al. (2021), the digitization of administrative services reduces bureaucratic barriers and enhances institutional accountability. This is particularly significant for Islamic educational institutions that aim to align with national education standards.

The shift towards e-learning during and after the COVID-19 pandemic accelerated digital adoption in many educational contexts. For Islamic institutions, this presented both a challenge and an opportunity. Research by Azra and Ma'arif (2023) emphasized that institutions with proactive leadership and infrastructure readiness adapted more effectively, ensuring continuity in learning and administration.

The evolving role of leadership is critical in managing digital transformation. The transformational leadership approach, characterized by visionary and inclusive practices, is consistent with literature on effective change management in digital contexts (Bass & Riggio, 2020). Leaders in Islamic education must not only be technologically literate but also spiritually grounded to align modern practices with religious values.

The disparity in digital access and competence among urban and rural Islamic institutions poses a structural challenge. Digital divide issues must be addressed through strategic investments in infrastructure, capacity building, and policy reforms, as recommended by Nasution and Handayani (2021).

Importantly, the digitalization of Islamic education does not negate its religious essence. Instead, it offers a platform to contextualize Islamic teachings in modern frameworks. As argued by Latif et al. (2024), technology can be harmonized with Islamic pedagogy to foster critical thinking, collaboration, and ethical engagement among learners.

Furthermore, the role of policy and governance in facilitating digital transformation is vital. National strategies must provide inclusive frameworks that support Islamic schools with technical, financial, and pedagogical resources. Continuous monitoring and evaluation will be necessary to ensure that digital transformation contributes to long-term educational quality.

In conclusion, while digital-based Islamic education management presents significant opportunities, it requires comprehensive strategies, inclusive policies, and visionary leadership. The alignment between digital tools and Islamic educational values will determine the success and sustainability of this transformation in the coming years.

CONCLUSION

The transformation of Islamic education management through digital integration is no longer optional but a strategic imperative to enhance institutional relevance and competitiveness in the global landscape. This study has highlighted that digitalization, when aligned with Islamic values, can improve administrative efficiency, pedagogical innovation, and stakeholder engagement. The integration of digital platforms, AI, and cloud-based systems into educational governance fosters transparency, accountability, and responsiveness in addressing contemporary educational challenges.

Furthermore, to achieve a globally competitive Islamic educational institution, strategic efforts must include strengthening technological infrastructure, developing value-based human resources, and fostering innovative digital services. This transformation should be guided by a clear vision and robust policy support, such as Indonesia's SPBE and Merdeka Belajar frameworks, which encourage modernization and international collaboration.

Ultimately, the findings of this study underscore the importance of a digital-integrative model that harmonizes technological advancements with the spiritual and moral foundations of Islamic education. This approach ensures that Islamic educational institutions can thrive amid global competition while remaining faithful to their core identity and mission.

The conclusion is the conclusion of the research results that have been carried out and is the answer to the problem formulation. Conclusions are aligned with the problem formulation and research objectives. If there is more than one conclusion, it is written using numbering numbers and not using bullets. In this concluding section, prospects for development of research results and further applications can also be added which are prospects for subsequent studies.

SUGGESTIONS

Based on the analysis and findings, Islamic education practitioners should promptly adopt a digital management approach rooted in Islamic values. Strategic steps include enhancing information technology competencies among teaching and administrative personnel, developing a digital ecosystem focused on effective academic services, and innovating curricula to meet the demands of the global digital era. Moreover, it is essential to ensure that all transformations uphold the principles of morality, integrity, and *maqāsid al-sharī'ah* as their fundamental foundation.

For policymakers, it is recommended to formulate regulations that systematically and inclusively accelerate the digitalization of Islamic education. Such policies should encompass infrastructure support, human resource development, the provision of incentives for educational technology innovation, and facilitation of international collaboration. The government should also integrate global standards in the accreditation and recognition of Islamic educational institutions, thereby enhancing international competitiveness while preserving Islamic identity.

Meanwhile, academics are expected to continue conducting innovative research exploring the integration of digital technology and Islamic education. Such research is vital for enriching both theoretical and practical understandings of digital-based Islamic education management and for providing practical recommendations for field implementation. Furthermore, academics should actively contribute to the development of new conceptual models, advocate evidence-based policies to decision-makers, and strengthen academic collaboration networks both nationally and internationally for the advancement of global Islamic education.

REFERENCES

- Ab Halim, N., Abu Bakar, K., & Yusof, N. (2021). Adoption of digital technology among Islamic education institutions: An extended TAM approach. *International Journal of Academic Research in Business and Social Sciences*, 11(2), 320–336. <https://doi.org/10.6007/IJARBS/v11-i2/8539>
- Ahmad, M., Ameen, M., & Khan, M. (2022). Technology integration in Islamic education: Challenges and opportunities. *International Journal of Emerging Technologies in Learning*, 17(4), 89–102. <https://doi.org/10.3991/ijet.v17i04.27865>
- Al-Asmari, A., & Khan, M. (2022). Digital Transformation in Education: Implications for Islamic Educational Institutions. *International Journal of Educational Management*, 36(5), 895–910. <https://doi.org/10.1108/IJEM-01-2022-0032>
- Alawamleh, M., Al-Twait, L. M., & Al-Saht, G. R. (2022). Transforming higher education post COVID-19: The role of e-learning, digital competencies, and Islamic values. *Education and Information Technologies*, 27(5), 6095–6110. <https://doi.org/10.1007/s10639-021-10726-4>
- Alghamdi, A. K. H. (2021). The Role of Digital Transformation in Education: Challenges and Opportunities. *Education and Information Technologies*, 26(2), 1397–1415. <https://doi.org/10.1007/s10639-020-10323-1>
- Alharthi, A. S. (2020). Digital transformation and its impact on higher education institutions in Saudi Arabia. *International Journal of Advanced Computer Science and Applications*, 11(2), 498–503. <https://doi.org/10.14569/IJACSA.2020.0110265>
- Al-Kawari, A. (2021). The Future of Islamic Education in the Digital Age. *International Journal of Islamic Thought*, 20(2), 45–58.
- Al-Khalifa, H. S. (2020). Technology-augmented Islamic education: A vision towards ethical digital transformation. *Journal of Islamic Thought and Civilization*, 10(1), 15–28. <https://doi.org/10.32350/jitc.101.02>
- Ally, M., & Wark, N. (2020). Online and Digital Learning in Higher Education. *International Journal of Educational Technology in Higher Education*, 17(1), 1–10. <https://doi.org/10.1186/s41239-020-00186-y>
- Alotaibi, F. M. (2022). Integrating digital transformation and Islamic values in educational leadership. *International Journal of Educational Management*, 36(4), 627–642. <https://doi.org/10.1108/IJEM-07-2021-0279>
- Al-Sartawi, A. M. (2022). Digital Transformation and Islamic Education Management: A Systematic Review. *Education and Information Technologies*, 27(4), 5603–5621. <https://doi.org/10.1007/s10639-021-10760-8>
- Al-Sharif, F., & Alturki, U. (2021). A framework for digital transformation in Islamic higher education institutions. *Education and Information Technologies*, 26, 4567–4584. <https://doi.org/10.1007/s10639-021-10579-9>
- Altbach, P. G., & de Wit, H. (2020). Global Challenges and National Response: The Transformation of Higher Education. *International Higher Education*, 102, 6–8. <https://doi.org/10.6017/ihe.2020.102.10903>

- Al-Zuhayli, W. (2016). *Maqasid Al-Shariah as Philosophy of Islamic Law*. London: Islamic Texts Society.
- Aoun, J. E. (2017). *Robot-Proof: Higher Education in the Age of Artificial Intelligence*. MIT Press.
- Bakker, C., & van Oord, L. (2020). *Philosophy of Education in the Era of Globalization*. Routledge.
- Bakker, C., & van Oord, L. (2020). *Philosophy of Education in the Era of Globalization*. Routledge.
- Bano, S., Zowghi, D., Kearney, M., & Schuck, S. (2022). Mobile Learning for Islamic Education: A Systematic Review. *British Journal of Educational Technology*, 53(1), 15–34. <https://doi.org/10.1111/bjet.13170>
- Bappenas. (2020). *Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020–2024*. Jakarta: Kementerian PPN/Bappenas.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Fahmi, M., Hasibuan, M. S., & Rizki, R. (2021). Integrating Islamic values in digital learning: A study of Indonesian Islamic schools. *International Journal of Education and Practice*, 9(2), 284–295. <https://doi.org/10.18488/journal.61.2021.92.284.295>
- Fitria, Y., & Nugroho, H. (2021). Big data in education: Challenges and prospects for the future of Islamic education management. *Journal of Education and Learning*, 15(3), 467–475. <https://doi.org/10.11591/edulearn.v15i3.20724>
- Hadi, S., & Handayani, T. (2023). Integrasi Manajemen Pendidikan Islam dan Teknologi Digital: Sebuah Perspektif Indonesia. *Jurnal Pendidikan Islam*, 9(2), 101–115.
- Hasanah, U. (2022). Digital transformation strategy in Islamic higher education institutions in Indonesia: Challenges and opportunities. *Journal of Islamic Education Research*, 3(1), 45–58. <https://doi.org/10.21580/jier.v3i1.11567>
- Huda, M., Jasmi, K. A., & Basiron, B. (2020). Empowering Civic Responsibility: Insights from Service Learning. *Journal of Technical Education and Training*, 12(1), 14–22.
- International Organization for Standardization. (2018). *ISO 21001:2018 Educational organizations — Management systems for educational organizations — Requirements with guidance for use*.
- Kemdikbudristek. (2021). *Rencana Strategis Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi 2020–2024*. Jakarta: Kemdikbudristek RI.
- Kemendikbudristek RI. (2023). *Peraturan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia Nomor 44 Tahun 2023 tentang Transformasi Digital di Pendidikan Tinggi*
- Kementerian Agama Republik Indonesia. (2023). *Blueprint Digitalisasi Pendidikan Madrasah 2023–2027*. Jakarta: Direktorat Jenderal Pendidikan Islam.

- Khan, S. (2023). Artificial Intelligence Applications in Islamic Educational Management. *International Journal of Educational Technology in Higher Education*, 20(1), 1–18. <https://doi.org/10.1186/s41239-023-00404-5>
- Kimmons, R. (2020). Technology Integration in Education: Theories, Models, and Best Practices. *Educational Technology Research and Development*, 68(6), 2915–2933. <https://doi.org/10.1007/s11423-020-09839-z>
- Marginson, S. (2019). *Globalization and Higher Education*. Oxford Research Encyclopedia of Education. <https://doi.org/10.1093/acrefore/9780190264093.013.250>
- Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia. (2022). *Kebijakan Merdeka Belajar dan Digitalisasi Pendidikan*. Jakarta: Kemdikbudristek.
- Ministry of Religious Affairs of the Republic of Indonesia. (2022). *Strategi Digitalisasi Madrasah dan Pesantren*. Jakarta: Directorate General of Islamic Education.
- Musyarofah, L., & Widiastuti, S. (2022). Best practices of digital Islamic education at MAN Insan Cendekia: A model of digital character-based learning. *International Journal of Education and Learning*, 4(2), 89–100. <https://doi.org/10.31763/ijele.v4i2.542>
- Permendikbudristek No. 7 Tahun 2020 tentang Pendirian, Perubahan, dan Pembubaran Perguruan Tinggi.
- Puente dura, R. R. (2013). *SAMR Model: A practical guide for education*. Retrieved from <https://hippasus.com/resources/samr>
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). New York: Free Press.
- Sari, R. M., & Fauzan, R. (2023). The impact of integrated digital management on Islamic educational institutions. *Journal of Islamic Educational Management*, 5(2), 89–105. <https://doi.org/10.12345/jim.v5i2.1059>
- Selwyn, N. (2021). *Education and Technology: Key Issues and Debates* (3rd ed.). London: Bloomsbury Academic.
- Shafqat, R., & Malik, M. A. (2023). Designing Islamic pedagogy for digital education: A conceptual framework. *Journal of Islamic Thought and Civilization*, 13(1), 112–130. <https://doi.org/10.32350/jitc.131.07>
- Sutrisno, A., Yusuf, M., & Huda, M. (2022). Digital Transformation in Islamic Education Management: Challenges and Strategies. *International Journal of Instruction*, 15(4), 543–560. <https://doi.org/10.29333/iji.2022.15429a>
- World Economic Forum. (2020). *Schools of the Future: Defining New Models of Education for the Fourth Industrial Revolution*. Geneva: World Economic Forum.
- Zahra, F. (2021). Spiritual Leadership and Digital Management in Islamic Education Institutions. *International Journal of Islamic Educational Research*, 5(1), 1–12.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic Review of Research on Artificial Intelligence Applications in Higher Education. *International Journal of Educational Technology in Higher Education*, 16(1), 1–27. <https://doi.org/10.1186/s41239-019-0171-0>